

HEMATOPOIETIC GROWTH FACTOR INDUCIBLE NEUROKININ-1 GENE

Rameshwar et al.

Application No. 10/039,272

Filing Date: October 20, 2001

1/10

1 cggcacgagg gccagagga auaaguuaac cuuggugccu gcguccguga gaauucagca

61 uggaaugucu cuacuauuuc cugggauuuc ugcuccuggc ugcaagauug ccacuugaug  
M E C L Y Y F L G F L L L A A R L P L D

121 ccgccaaacg auuucaugau gugcugggca augaaagacc uucugcuuac augagggagc  
A A K R F H D V L G N E R P S A Y M R E

181 acaucaaau aaauuggcugg ucuucugaug aaaugacug gaaugaaaaa cucuacccag  
H N Q L N G W S S D E N D W N E K L Y P

241 uguggaagcg gggagacaug agggggaaaa acuccuggaa gggaggccgu ggcaggcgg  
V W K R G D M R W K N S W K G G R V Q A

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V L T S D S P A L V G S N I T F A V N L

361 uauucccuag augccaaaag gaagaugcca auggcaacau agucuaugag aagaacugca  
I F P R C Q K E D A N G N I V Y E K N C

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R N E A G L S A D P Y V Y N W T A W S E

481 acagugacgg ggaauauggc accggccaaa gccaucuaa cgucuucccu gaugggaaac  
D S D G E N G T G Q S H H N V F P D G K

541 cuuuuccuca ccaccccggg uggagaagau ggaauuucan cuacgucuuc cacacacuug  
P F P H H P G W R R W N F I Y V F H T L

601 gucaguauuu ccagaaaauug ggacgauguu cagugagagu uucugugaac acagccaaug  
G Q Y F Q K L G R C S V R V S V N T A N

661 ugacacuugg gccucaacuc auggaaguga cugucuacag aagacaugga cgggcauau  
V T L G P Q L M E V T V Y R R H G R A Y

721 uucccaucgc acaagugaaa gauguguacg ugguaacaga ucagauuccu guguuuguga  
V P I A Q V K D V Y V V T D Q I P V F V

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T M F Q K N D R N S S D E T F L K D L P

841 uuauguuuga uguccugauu caugaucua gccacuuccu cauuauucan accauuaacu  
I M F D V L I H D P S H F L N Y S T I N

901 acaaguggag cuucggggau aaucugggc uguuuguuuc caccauucan acugugaau  
Y K W S F G D N T G L F V S T N H T V N

961 acacguangu gcucaaugga accuucagcc uuaaccucac ugugaaagcu gcagcaccag  
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1021 gaccuugucc gccaccgcca ccaccacca gaccuucan acccaccuccu ucuuaggac  
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1141 gauauggcca cuuucagcc accaucacaa uuguagaggg aaucuagag guuaacauca  
R Y G H F Q A T I T I V E G I L E V N I

Fig.1A

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2/10

1201	uccagau	gac	agacgu	ccug	augccg	gugc	cauggcc	uga	aagcucc	cua	auagacu	uug								
	I	Q	M	T	D	V	L	M	P	V	P	W	P	E	S	S	L	I	D	F
1261	ucgugac	ccug	ccaagg	gagc	auuccc	acgg	aggucug	uac	caucau	uuc	gacccc	accu								
	V	V	T	C	Q	G	S	I	P	T	E	V	C	T	I	I	S	D	P	T
1321	gcgagau	cac	ccagaac	aca	gucugc	agcc	cugugg	augu	ggaugag	aug	ugucug	cuga								
	C	E	I	T	Q	N	T	V	C	S	P	V	D	V	D	E	M	C	L	L
1381	cugugag	acg	aaccuuc	aa	gggucug	gga	cguacug	ugu	gaaccuc	acc	cugggg	gaug								
	T	V	R	R	T	F	N	G	S	G	T	Y	C	V	N	L	T	L	G	D
1441	acacaag	ccu	ggcucuc	acg	agcacc	cuga	uuucugu	uucc	ugacag	agac	ccagcc	cucg								
	D	T	S	L	A	L	T	S	T	L	I	S	V	P	D	R	D	P	A	S
1501	cuuaaag	gau	ggcaa	acagu	gcccug	aucu	ccguugg	cug	cuuggcc	aua	uuuguc	acug								
	P	L	R	M	A	N	S	A	L	I	S	V	G	C	L	A	I	F	T	V
1561	ugaucucc	cu	uuggugu	uac	aaaaa	acaca	aggaau	acaa	cccaau	agaa	aa	uagucc	ug							
	I	S	L	L	V	Y	K	K	H	K	E	Y	N	P	I	E	N	S	P	G
1621	ggaaugug	gu	cagaag	caaa	ggccug	agug	ucuuuc	ucua	ccgugc	aaaa	gccgug	uucu								
	N	V	V	R	S	K	G	L	S	V	F	L	N	R	A	K	A	V	F	F
1681	ucccg	ggg	aaa	ccagg	aaa	ag	gauccg	cuac	ucaaaa	acca	agaauu	uu	aaa	ggagu	uu	cuu				
	P	G	N	Q	E	K	D	P	L	L	K	N	Q	E	F	K	G	V	S	
1741	aaauuuc	gac	cuuguu	ucug	aagcuc	acuu	uucagug	cca	uugaug	ugag	augugc	ugga								
1801	guggcu	auua	accuuu	uuuu	ccuaa	agauu	auuguu	aaa	u	agaua	uugug	guuugggg	aa							
1861	guuga	auuuu	uuauag	guua	aauguc	auuu	uagaga	uggg	gagagg	gauu	auacug	cagg								
1921	cagcuuc	agc	cauguu	guga	aacug	auaaa	agcaac	uuag	caaggc	uucu	uucauu	auu								
1981	uuuuau	guuu	cacuu	auaaa	gucuu	aggua	acuagu	agga	uagaa	acacu	gugucc	cgag								
2041	aguaag	gaga	gaagcu	acua	uugauu	agag	ccuaac	ccag	guuaac	ugca	agaag	aggcg								
2101	ggauac	uuuc	agcuuu	ccau	guaacug	uau	gcauaa	agcc	aaugu	agucc	aguuu	cuaag								
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2281	cucuca	uaaa	ugggug	ggag	uauuu	uggug	acaacc	uacu	uugcu	uggcu	gaguga	agga								
2341	augau	auuca	uauau	ucauu	uauucc	augg	acauuu	aguu	agugcu	uuuu	auauac	cagg								
2401	cauga	ucug	agugac	acuc	uugugu	auau	uuccaa	auuu	uuguau	aguc	gcugca	aua								
2461	uuugaa	auca	aaauau	uaag	acuuucc	aaa	aaauug	gucc	cugguuu	uuc	auggca	acuu								
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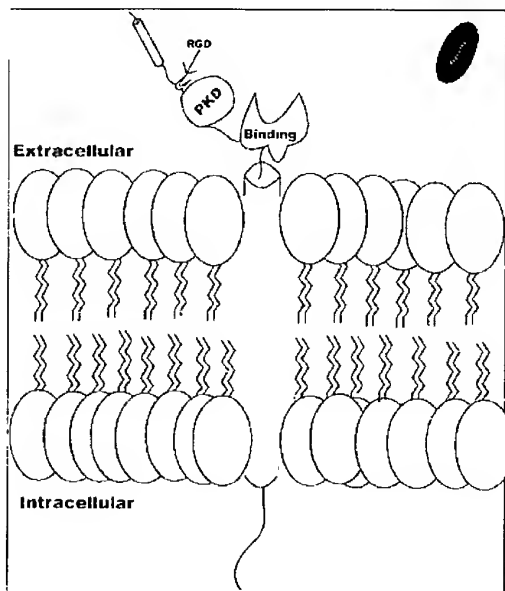
Fig.1B

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Rameshwar et al.  
Application No. 10/039,272  
Filing Date: October 20, 2001

3/10

A.



B.

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1  MECLYYFLGF  LLLAARLPLD  AAKRFHDVLG  NERPSAYMRE  HNQLNGWSSD
51  ENDWNEKLYP  VWKRGDMRWK  NSWKGGRVQA  VLTSDSPALV  GSNITFAVNL
101 IFPRCQKEDA  NGNIVYEKNC  RNEAGLSADP  YVYNWTAWSE  DSDGENGTGQ
151 SHHNVFPDGK  PFPHHPGWRR  WNFIYVFHTL  GQYFQKLGRG  SVRVSVNTAN
201 VTLGPQLMEV  TVYRRHGRAY  VPIAQVKDVY  VVTDQIPVFV  TMFQKNDRNS
251 SDETFLKDLP  IMFDVLIHDP  SHFLNYSTIN  YKWSFGDNTG  LFVSTNHTVN
301 HTYVLNGTFS  LNLTVKAAAP  GPCPPPPPPP  RPSKPTPSLG  PAGDNPLELS
351 RIPDENCQIN  RYGHFQATIT  IVEGILEVNI  IQMTDVLMPV  PWPESSLIDF
401 VVTCQGSIPT  EVCTIISDPT  CEITQNTVCS  PVDVDEMCLL  TVRRTFNGSG
451 TYCVNLTLGD  DTSALTSTL  ISVPDRDPAS  PLRMANSALI  SVGCLAIFVT
501 VISLLVYKKH  KEYNPIENSP  GNVVRSKGLS  VFLNRAKAVF  FPGNQEKDPL
551 LKNQEEFKGVS

```

**RGD = Cell Adhesion region**

**N = ASN Glycosylation Site**

*PKD Region;*

**Transmembrane**

Fig.2

4/10

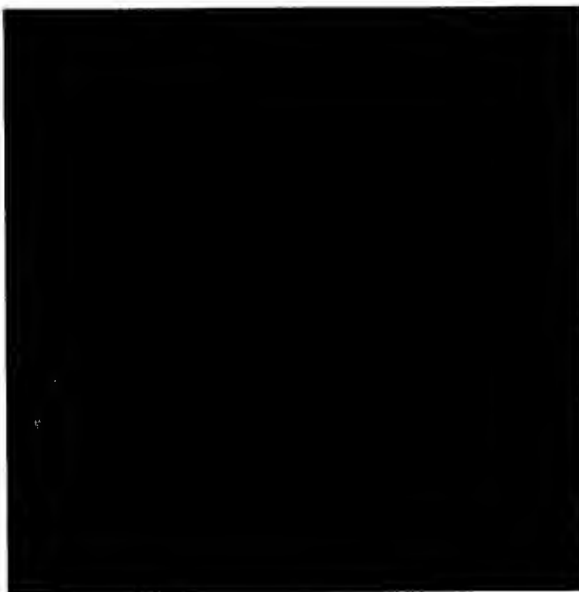
**A. HGFIN-PKD**



**B. PKD (1B4R)**



**C. SP-HGFIN**



**D. SP**



**Fig.3**

# HEMATOPOIETIC GROWTH FACTOR INDUCIBLE NEUROKININ-1 GENE

Rameshwar et al.

Application No. 10/039,272

Filing Date: October 20, 2001

5/10

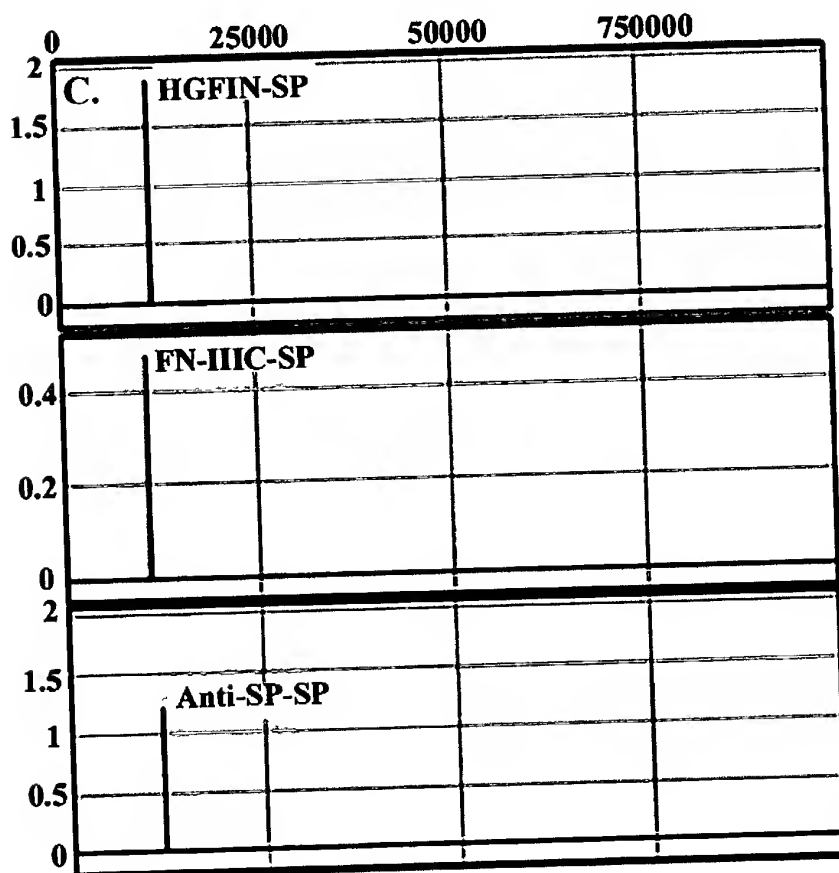
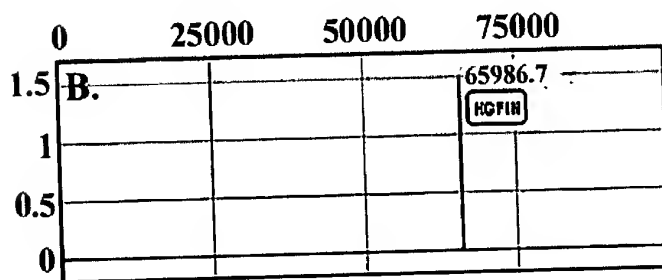
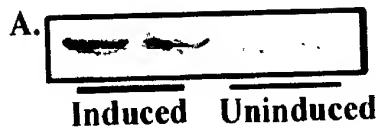
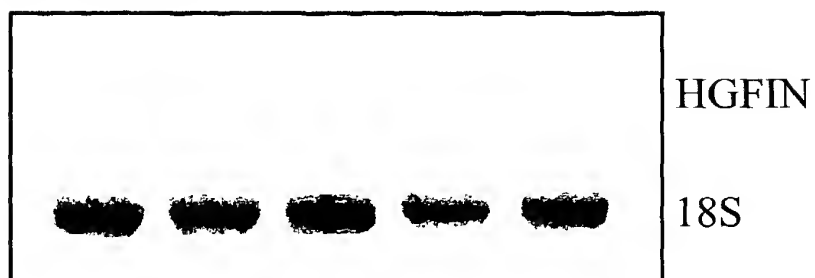
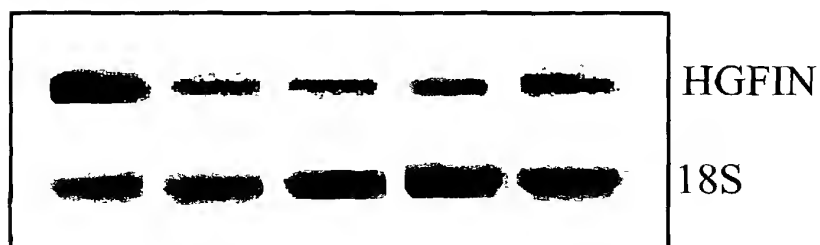


Fig.4

**A. BMNC**



**B. PBMC**



**C. Differentiated BMNC**

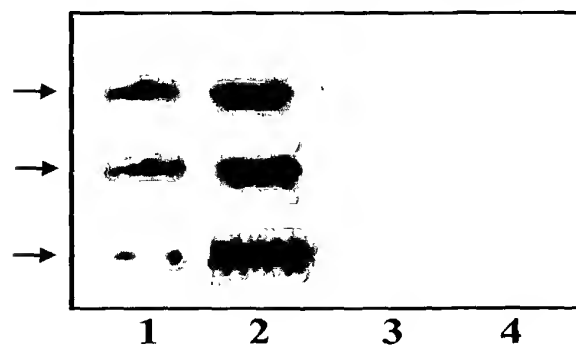


Fig.5

7/10

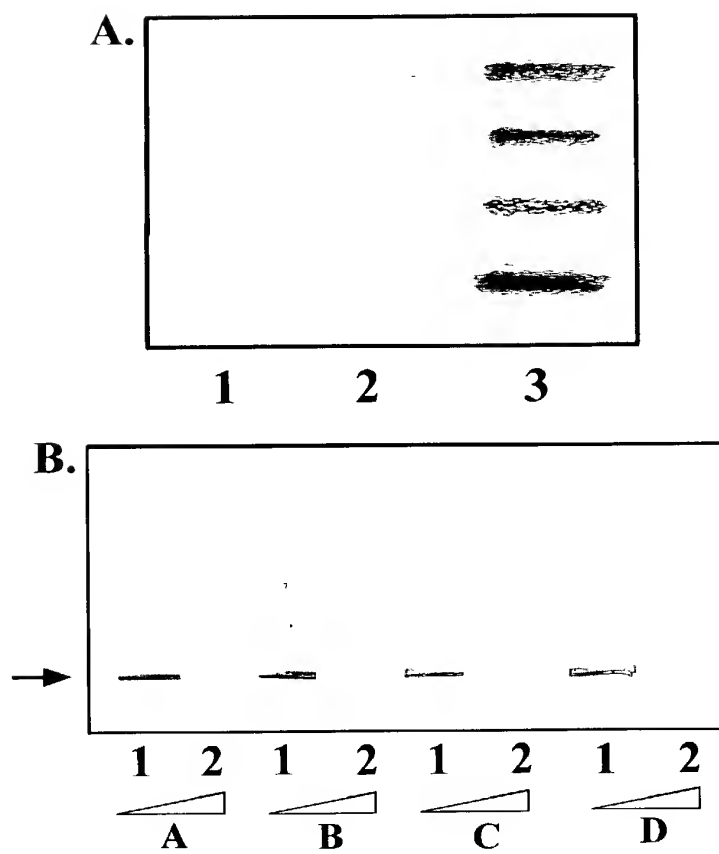


Fig.6

8/10

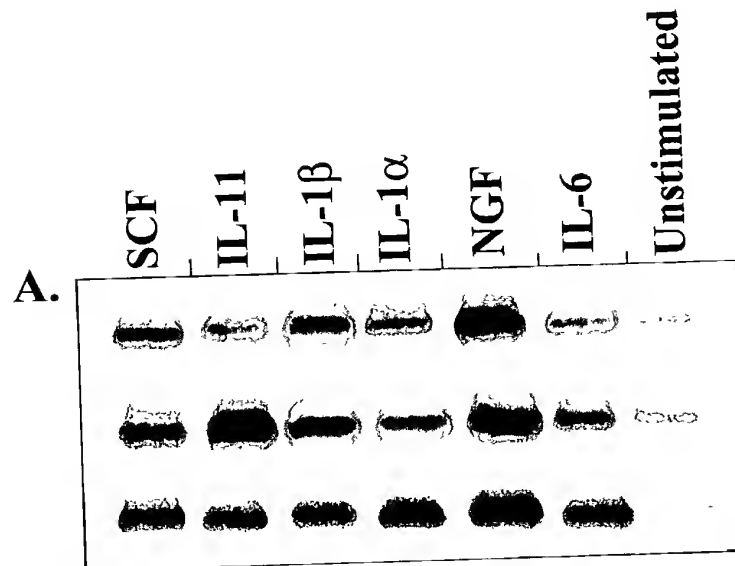


Fig.7A



9/10

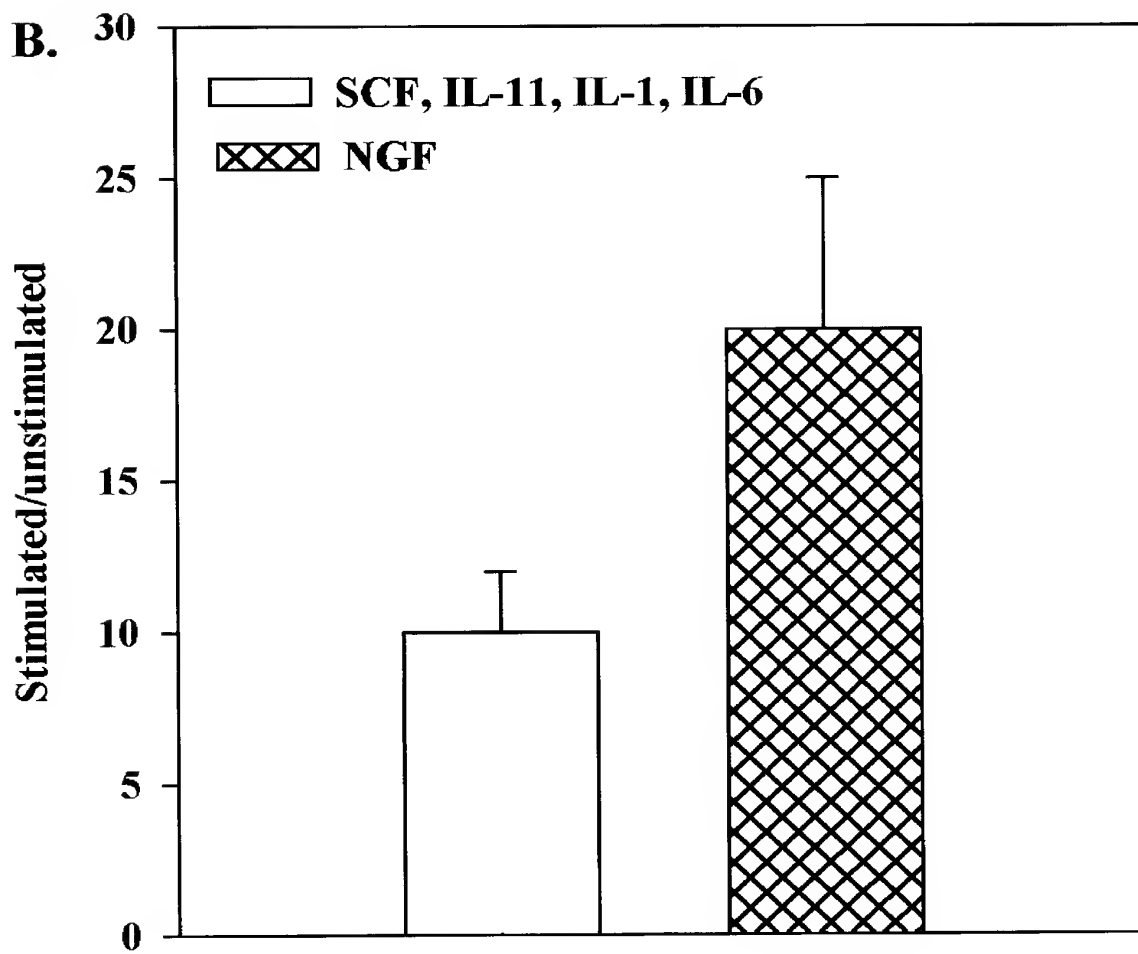


Fig.7B

10/10

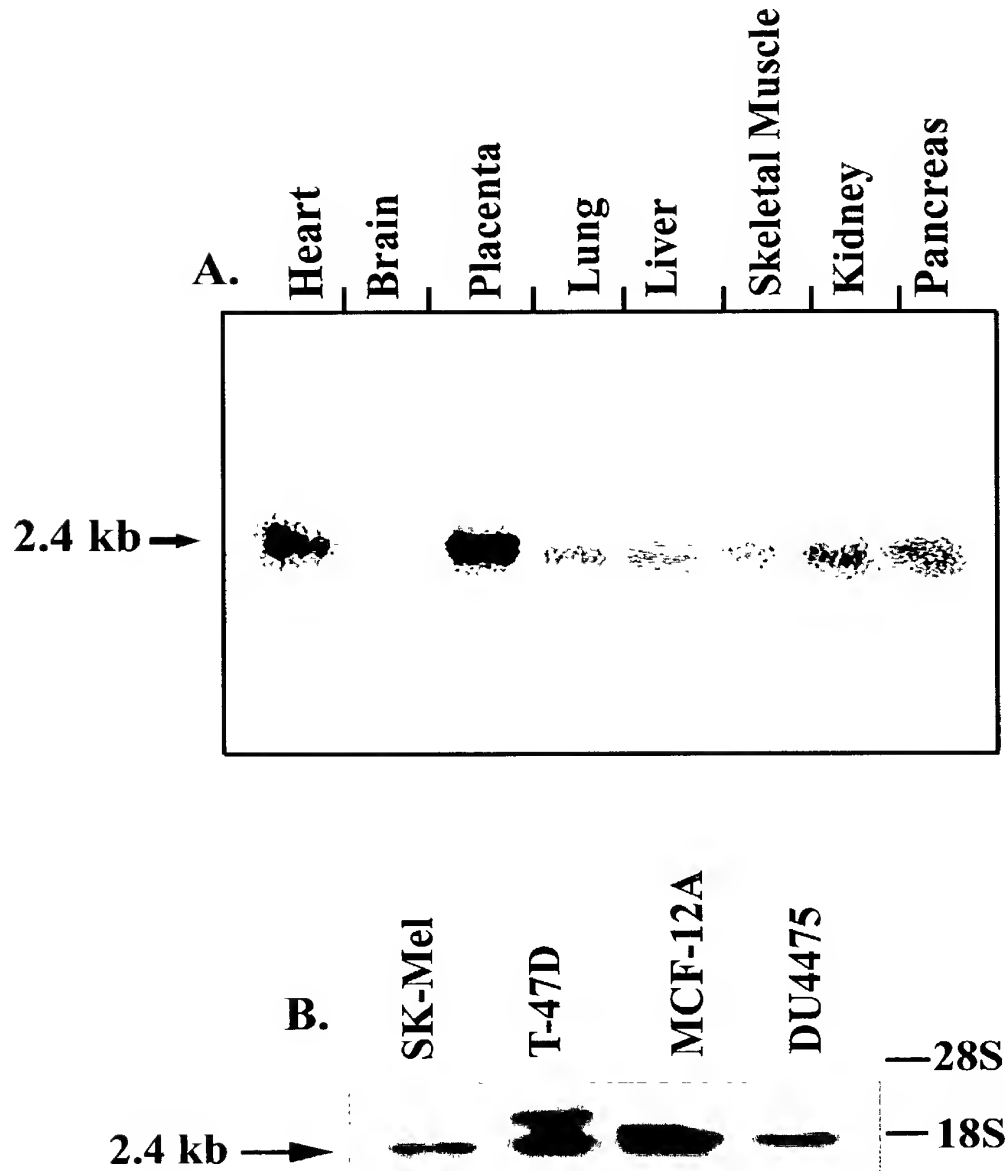


Fig.8